

AMENDMENTS TO THE CLAIMS

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently amended) A method for ~~stimulating angiogenesis~~ enclosing at least one body formed of a biocompatible material within myocardial tissue, comprising:

employing a delivery system for accessing the myocardial tissue,
penetrating the myocardial tissue, and

operating the delivery system for enclosing within the myocardial tissue at least one body formed of a biocompatible material and dimensionally adapted for being enclosed within the myocardial tissue, wherein said body defines a lumen that is adapted to maintain an open cavity in the tissue sufficient to permit blood pooling in the lumen and the body comprises external projections configured to create cavities between the tissue and the body sufficient to permit blood pooling in the cavities, ~~to thereby stimulate angiogenesis.~~

2. (Original) A method according to claim 1, wherein employing a delivery system includes employing a catheter delivery system.

3. (Previously presented) A method according to claim 1, wherein employing a delivery system for accessing the myocardial tissue includes guiding a catheter delivery system through a patient's vascular system.

4. (Canceled)

5. (Previously presented) A method according to claim 1, wherein penetrating the myocardial tissue includes driving a distal portion of the delivery system into the myocardial tissue.

6. (Previously presented) A method according to claim 1, wherein penetrating the myocardial tissue includes driving the at least one body into the myocardial tissue.

7. (Previously presented) A method according to claim 1, wherein operating the delivery system includes operating a delivery system that substantially seals the at least one body within the myocardial tissue.

8. (Previously presented) A method according to claim 1, wherein operating the delivery system for enclosing at least one body within the myocardial tissue includes implanting a plurality of bodies within the myocardial tissue.

9. (Previously presented) A method according to claim 1, wherein operating the delivery system for disposing at least one body within the myocardial tissue includes implanting at least one body adapted for promoting blood pooling within the myocardial tissue.

10. (Previously presented) A method according to claim 1, wherein operating the delivery system includes operating the delivery system for delivering into the myocardial tissue an agent for promoting angiogenesis.

11. (Currently amended) A method for ~~stimulating angiogenesis~~ enclosing at least one body formed of a biocompatible material within myocardial tissue, comprising:

accessing the myocardial tissue with a delivery system,
penetrating the myocardial tissue, and

releasing within the myocardial tissue at least one body formed of a biocompatible material and dimensionally adapted for being enclosed within the myocardial tissue, wherein said body defines a lumen that is adapted to maintain an open cavity in the tissue sufficient to permit blood pooling in the lumen and the body comprises external projections configured to

create cavities between the tissue and the body sufficient to permit blood pooling in the cavities, to ~~thereby stimulate angiogenesis~~, said biocompatible material being capable of inciting an inflammatory reaction with the tissue of the myocardial tissue.

12. (Currently amended) A method for ~~promoting angiogenesis~~ implanting at least one flexible body within myocardial tissue, comprising:

accessing the myocardial tissue with a delivery system, penetrating the myocardial tissue, releasing within the myocardial tissue at least one flexible body dimensionally adapted for implantation within the myocardial tissue, said body having been subjected to deforming stress prior to its release within the myocardial tissue and said body dynamically approximating the recovery of its native configuration after its implantation, and withdrawing the delivery system from its proximity to the myocardial tissue.

13. (Currently amended) A method for ~~promoting angiogenesis~~ releasing at least one body formed of a heat responsive material within myocardial tissue, comprising:

accessing the myocardial tissue with a delivery system, penetrating the myocardial tissue, releasing within the myocardial tissue ~~[[a]]~~ at least one body formed of a heat responsive material, said body undergoing dimensional change upon exposure to intramuscular heat, and withdrawing the delivery system from its proximity to the myocardial tissue.

14-32. (Cancelled)

33. (Previously presented) A method according to claim 1, wherein the body comprises a spring, further comprising at least one opening between the coils of the spring.

34. (Previously presented) A method according to claim 1 further comprising a drug releasing compound retained by a surface of the body.

35. (Previously presented) A method according to claim 34 wherein the drug releasing compound is contained within an internal reservoir of the body.

36. (Previously presented) A method according to claim 34 wherein the drug releasing compound is applied to a surface of the body by a coating.
37. (Previously presented) A method according to claim 34 wherein at least a portion of the body is formed from a drug releasing compound.
38. (Previously presented) A method according to claim 1 further comprising a radiation source carried by the body.
39. (Previously presented) A method according to claim 1, where the body is flexible and comprises a bellows for expanding and contracting responsive to myocardial tissue relaxation and contraction and wherein the external projections are defined by annular ripples.
40. (Previously presented) A method according to claim 1, where the body is flexible and comprises a plurality of tighter pitch spring sections connected by two open pitch spring elements, where the external projections are defined by the tighter pitch spring sections.
41. (Previously presented) A method according to claim 1, where the body is cone-shaped with a distal tip, and the external projections are a series of barbs on the external surface.
42. (Previously presented) A method according to claim 39, where the body further comprises an enclosed cavity and a port in the body open to the cavity and a drug releasing compound contained within the cavity, where during contraction of the bellows the compound diffuses through the port.
43. (Previously presented) A method according to claim 1, wherein the body is cone-shaped, further comprising a central tapered cavity with a proximal opening and a solid distal tip.
44. (Previously presented) A method according to claim 33, further comprising a drug releasing compound retained within the lumen of the spring.

45. (Previously presented) A method according to claim 44, further comprising a drug releasing compound retained within the central tapered cavity.